



Group Art Unit: 1713

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant (s): James C. Stevens, et. al

Serial No.: 10/037,335

Examiner: R. Rabago Filed: November 6, 2001 For: CONSTRAINED GEOMETRY ADDITION POLYMERIZATION

CATALYSTS

I HEREBY CERTIFY THAT THIS CORRESPONDENCE IS BEING DEPOSITED WITH THE UNITED STATES POSTAL SERVICE AS FIRST CLASS MAIL WITH SUFFICIENT POSTAGE IN AN ENVELOPE ADDRESSED TO: ASSISTANT COMMISSIONER FOR PATENTS, WASHINGTON, DC 20231, ON:

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Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

PRIOR ART STATEMENT

Certain references cited in previously submitted information disclosure citations were incorrectly or incompletely identified. Specifically, the following is the complete citation of two references contained in the EPO search report of the equivalent application to the priority application from which the present application claims benefit, copies of which are already of record.

Gmelins Handbuch der Anorganisches Chemie, vol. 10: "Zirkonium-Organische Verbindungen", pp 14-25, (1973), Verlag Chemie, GmbH, Weinheim, DE.

Gmelins Handbuch der Anorganisches Chemie, vol. 11: "Hafnium-Organische Verbindungen", pp 3-7, (1973), Verlag Chemie, GmbH, Weinheim, DE.

In as much as the foregoing references relate to zirconium or hafnium metal complexes and not titanium metal complexes, the same are not considered to be material to the present claims. A copy of the pertinent EPO search report is also included for completion of the file.





In view of the present amendment of applicants' claims, the following references (not all of which are considered to be prior art) may be considered to be material to consideration of the present claims.

USP 5,453,410 disclosed a mixture of an alumoxane and a cation forming cocatalyst such as a Lewis acid, Bronsted acid salt, or ferrocenium salt in a specified ratio as a cocatalyst combination for use with constrained geometry catalysts.

USP 5,077,367 disclosed use of a mixture of an alumoxane and an alkylaluminum compound as cocatalysts for monocyclopentadienyl Group 4 metal complexes, but not for constrained geometry metal complexes.

USP's 5,064,802 and 5,132,380, assigned to The Dow Chemical Company, relate to cationic constrained geometry catalyst compositions formed for example by the use of ammonium borate salt cocatalysts. Mixtures of such activators were not disclosed.

USP's 5,408,017, 5,621,126, 5,801,113, 6,294,625, 6,355,592, and 6,423,795 (all equivalent to WO92/00333) relate to cationic constrained geometry catalyst compositions formed by the use of a cationic salt activator with or without a donatable proton. The use of mixtures of such activators was not disclosed. The priority application upon which all of these patents claim benefit, 07/542,236, was involved in and ultimately awarded priority in several interferences with the previously discussed '802 and '380 patents.

USP 6,013,819 assigned to The Dow Chemical Company relates to constrained geometry metal complexes in the +3 formal oxidation state and catalyst compositions formed therefrom by combination with an activating cocatalyst.

USP's 5,026,798, 5,055,438, 5,096,867 and 5,168,111 relate to constrained geometry metal complexes and catalyst compositions including such complexes in combination with an alumoxane.

USP's 5,721,185, 5,350,723 and 5,625,087 relate to the use of a Lewis acid cocatalysts such as trispentafluorophenyl borane, carbonium salts, or silylium salts respectively in combination with a constrained geometry metal complex.

Respectfully submitted,

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